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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

ASRock Website: http://www.asrock.com

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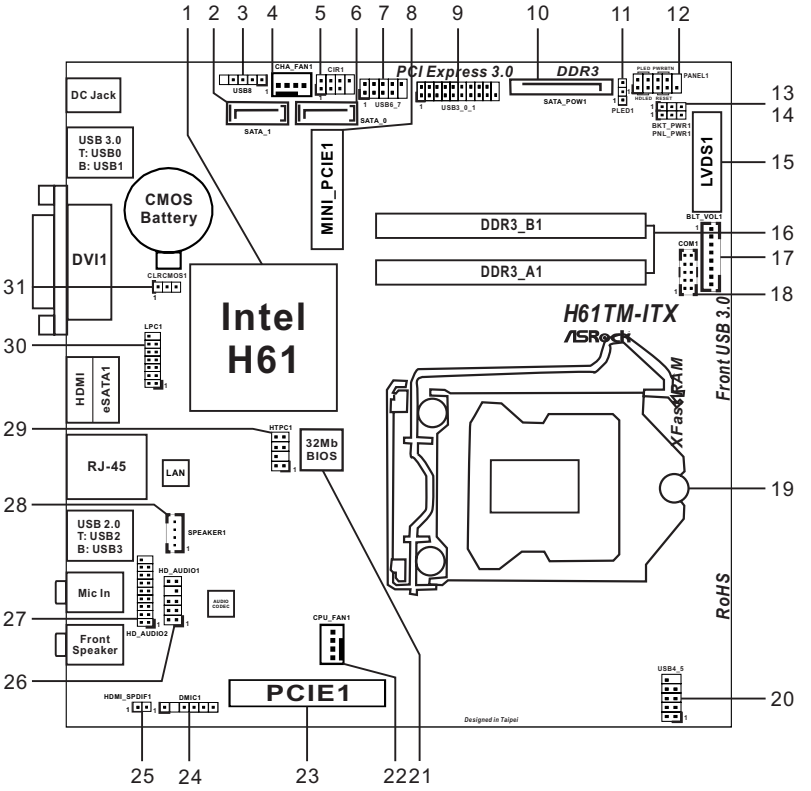
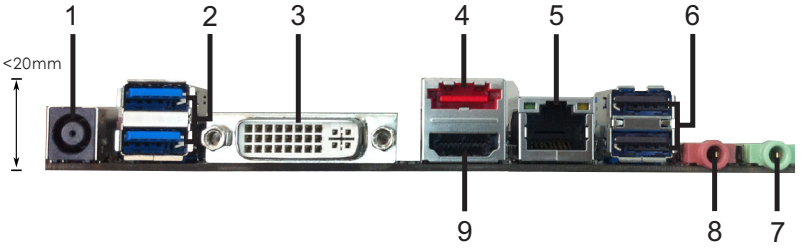
English

Motherboard Layout



1	Intel H61 Chipset
2	SATA2 Connector (SATA_1)
3	USB 2.0 Header (USB8)
4	Chassis Fan Connector (CHA_FAN1)
5	Consumer Infrared Module Header (CIR1)
6	SATA2 Connector (SATA_0)
7	USB 2.0 Header (USB6_7)
8	Mini PCI Express Slot (MINI_PCIE1)
9	USB 3.0 Header (USB3_0_1)
10	SATA Power Connector (SATA_POW1)
11	Power LED Header (PLED1)
12	System Panel Header (PANEL1)
13	Backlight Power Jumper (BKT_PWR1)
14	Panel Power Jumper (PNL_PWR1)
15	LVDS Connector (LVDS1)
16	2 x 204-pin DDR3 SO-DIMM Slots (DDR3_A1, DDR3_B1)
17	Backlight & Amp Volume Control Header (BLT_VOL1)
18	COM Port Header (COM1)
19	1155-Pin CPU Socket
20	USB 2.0 Header (USB4_5)
21	SPI Flash Memory (32Mb)
22	CPU Fan Connector (CPU_FAN1)
23	PCI Express 3.0 x4 Slot (PCIE1)
24	Digital MIC Header (DMIC1)
25	HDMI_SPDIF Header (HDMI_SPDIF1)
26	Front Panel Audio Header (HD_AUDIO1)
27	Analog Surround Audio Header (HD_AUDIO2)
28	3W Audio AMP Output Wafer Header (SPEAKER1)
29	Home Theater PC Header (HTPC1)
30	LPC Debug Header (LPC1)
31	Clear CMOS Jumper (CLRCMOS1)

I/O Panel



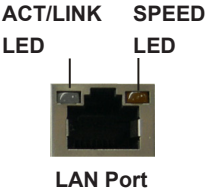
1*	DC Jack
2	USB 3.0 Ports (USB01)
3	DVI-I (DVI1)
4	eSATA Connector (eSATA1)
5**	LAN RJ-45 Port
6	USB 2.0 Ports (USB23)
7	Front Speaker (Lime)
8	Microphone (Pink)
9	HDMI Port (HDMI1)

* Please use a 19V power adaptor for the DC jack. This jack accepts dual barrel plugs with an inner diameter of 2.5 mm and an outer diameter of 5.5 mm, where the inner contact is +8 (±10%) through +19 (±10%) VDC and the shell is GND. The maximum current rating depends on the power adaptor. The following are examples of power adaptors that may be used:

DELTA DELTA-ADP-150TB-150W/19V
HP HP-TBC-BA52-150W/19V
FSP FSP-FSP150-ABAN1-150W/19V

** There are two LEDs on the LAN port. Please refer to the table below for the LAN port LED indications.

LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Yellow	1Gbps connection



1. Introduction

Thank you for purchasing ASRock ***H61TM-ITX*** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

This Quick Installation Guide contains introduction of the motherboard. More detailed information of the motherboard can be found in the user manual presented in the Support CD.

Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock's website. You may find the latest VGA cards and CPU support list on ASRock's website as well. http://www.asrock.com

If you require technical support related to this motherboard, please visit our website for specific information about the model you are using. www.asrock.com/support/index.asp

1.1 Package Contents

ASRock ***H61TM-ITX*** Motherboard
(Thin Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm)
ASRock ***H61TM-ITX*** Quick Installation Guide
ASRock ***H61TM-ITX*** Support CD
2 x SATA Data Cables (Optional)
1 x SATA 1 to 1 Power Cable (Optional)
2 x I/O Panel Shields (Optional)

English

1.2 Specifications

Platform	Thin Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm (Compatible with Mini-ITX)
	Solid Capacitors for CPU power
CPU	Supports 3rd and 2nd Generation Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® processors with up to 65W TDP in an LGA1155 Package
	Supports Intel® Turbo Boost 2.0 Technology
	Supports Intel® K-Series unlocked CPU
	Supports Hyper-Threading Technology
Chipset	Intel® H61
	Supports Intel® Rapid Start Technology and Smart Connect Technology
Memory	Dual Channel DDR3 Memory Technology
	2 x DDR3 SO-DIMM slots
	Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory
	Max. capacity of system memory: 16GB (see **CAUTION 1**)
Expansion Slots	1 x PCI Express 3.0 x4 slot (PCIE1: x4 mode) (see **CAUTION 2**)
	1 x mini-PCI Express slot
Graphics	Supports Intel® HD Graphics Built-in Visuals (see **CAUTION 3**)
	Pixel Shader 5.0, DirectX 11 with Intel® Ivy Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel® Sandy Bridge CPU
	Max. shared memory 1760MB with Intel® Ivy Bridge CPU. Max. shared memory 1759MB with Intel® Sandy Bridge CPU
	Three VGA Output options: HDMI, DVI-I and LVDS
	Supports HDMI 1.4a Technology with max. resolution up to 1920x1200 @ 60Hz
	Supports DVI-I with max. resolution up to 1920x1200 @ 75Hz
	Supports LVDS with max. resolution up to 1920x1200 @ 60Hz
	Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI
	Supports HDCP with HDMI
	Supports Full HD 1080p Blu-ray (BD) / HD-DVD playback with HDMI

Audio	7.1 CH HD Audio with Content Protection (Realtek ALC892 Audio Codec)
	Premium Blu-ray audio support
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Supports Wake On LAN
	Supports LAN Cable Detection
	Supports Energy Efficient Ethernet 802.3az
	Supports PXE
Rear Panel I/O	1 x DC Jack
	1 x DVI-I Port
	1 x HDMI Port
	1 x eSATA Connector
	2 x USB 3.0 Ports by Etron EJ188
	2 x USB 2.0 Ports
	1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)
	HD Audio Jacks: Front Speaker / Microphone
Connectors	2 x SATA2 3.0 Gb/s connectors, support NCQ, AHCI and Hot Plug
	1 x CIR header
	1 x COM port header
	1 x HDMI_SPDIF header
	1 x LVDS connector
	1 x LPC Debug header
	1 x Home Theater PC header
	1 x CPU Fan connector (4-pin)
	1 x Chassis Fan connector (4-pin)
	1 x Front Panel Audio connector
	1 x Analog Surround Audio header
	1 x Digital MIC header
	1 x 3W Audio AMP Output Wafer header
	1 x SATA Power connector
	3 x USB 2.0 headers (support 5 USB 2.0 ports)
	1 x USB 3.0 header by Etron EJ188 (supports 2 USB 3.0 ports)
BIOS	32Mb AMI UEFI Legal BIOS with GUI support
	Supports “Plug and Play”
	ACPI 1.1 Compliance Wake Up Events
	Supports jumperfree
	SMBIOS 2.3.1 Support

	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Voltage Multi-adjustment
Support CD	Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser and Toolbar
Hardware Monitor	CPU/Chassis Temperature Sensing
	CPU/Chassis Fan Tachometer
	CPU/Chassis Quiet Fan
	CPU/Chassis Fan Multi-Speed Control
	Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
Certifications	FCC, CE, WHQL
	ErP/EuP Ready (ErP/EuP ready power supply is required)

* For detailed product information, please visit our website: http://www.asrock.com

CAUTION!

1. Due to limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® 32-bit operating systems. Windows® 64-bit operating systems do not have such limitations. You can use ASRock XFast RAM to utilize the memory that Windows® cannot use.
2. PCIE 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIE 2.0.
3. Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 are supported by Intel® Ivy Bridge CPU. Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) are supported by Intel® Sandy Bridge CPU.

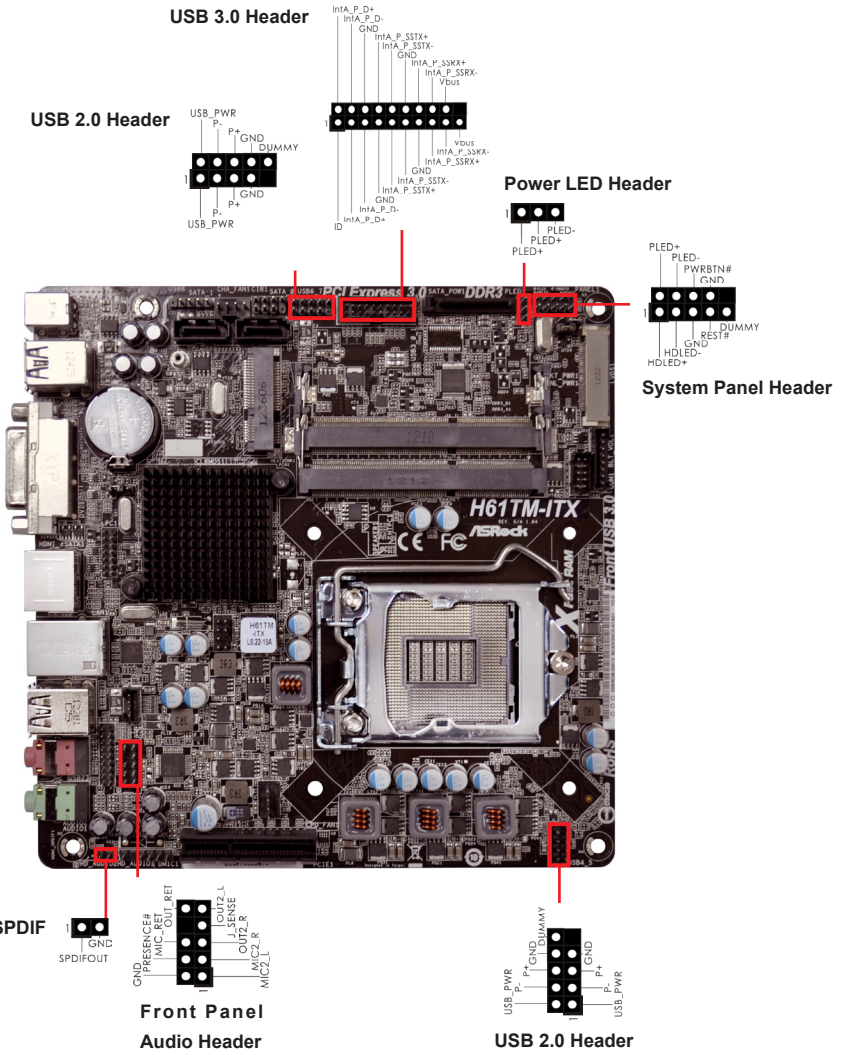
English

WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using third-party overclocking tools. Overclocking may affect your system's stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

1.3 Pin Header Easy Installation Guide

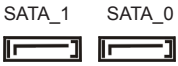
ASRock motherboards are equipped with pin headers with obvious colors that assist you to recognize the crucial headers. Please refer to the illustration of the onboard headers' pin defintion below. If you need more information about the usage of these headers, please refer to "Onboard Headers and Connectors" and "Jumper Setup" for details.



1.4 Onboard Headers and Connectors

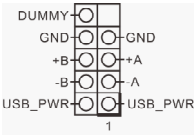
Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage to the motherboard!

Serial ATA2 Connectors
(SATA_0:
see p.2, No. 6)
(SATA_1:
see p.2, No. 2)

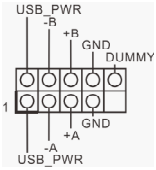


These two Serial ATA2 (SATA2) connectors support SATA data cables for internal storage devices. The current SATA2 interface allows up to 3.0 Gb/s data transfer rate.

USB 2.0 Headers
(9-pin USB4_5)
(see p.2, No. 20)

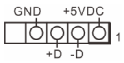


(9-pin USB6_7)
(see p.2, No. 7)

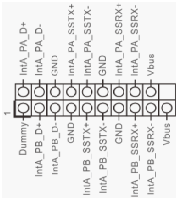


Besides two default USB 2.0 ports on the I/O panel, there are three USB 2.0 headers and one USB port on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

(4-pin USB8)
(see p.2, No. 3)



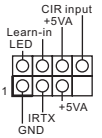
USB 3.0 Header
(19-pin USB3_0_1)
(see p.2, No. 9)



Besides two default USB 3.0 ports on the I/O panel, there is one USB 3.0 header on this motherboard. The USB 3.0 header can support two USB 2.0 ports.

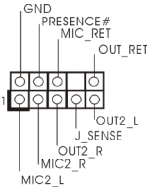
English

Consumer Infrared Module Header
(7-pin CIR1)
(see p.2, No. 5)



This header can be used to connect the remote controller receiver.

Front Panel Audio Header
(9-pin HD_AUDIO1)
(see p.2, No. 26)

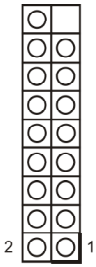


This is an interface for the front panel audio cable that allows convenient connection and control of audio devices.

1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instructions in our manual and chassis manual to install your system.
2. If you use an AC'97 audio panel, please install it to the front panel audio header by the steps below:
   A. Connect Mic_IN (MIC) to MIC2_L.
   B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
   C. Connect Ground (GND) to Ground (GND).
   D. MIC_RET and OUT_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.
   E. To activate the front mic.
      For Windows® XP / XP 64-bit OS:
      Select "Mixer". Select "Recorder". Then click "FrontMic".
      For Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS:
      Go to the "FrontMic" Tab in the Realtek Control panel. Adjust "Recording Volume".

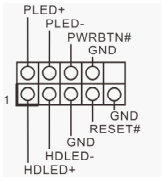
English

Analog Surround Audio Header
(17-pin HD_AUDIO2)
(see p.2, No. 27)



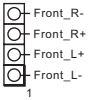
PIN	Signal Name	PIN	Signal Name
18	SENSE	17	KEY
16	LFE	15	A_GND
14	A_GND	13	Center
12	Surr_Rear_R	11	A_GND
10	A_GND	9	Surr_Rear_L
8	Surr_Side_R	7	A_GND
6	A_GND	5	Surr_Side_L
4	Front_R	3	A_GND
2	A_GND	1	Front_L

System Panel Header
(9-pin PANEL1)
(see p.2, No. 12)



Connect the power switch, reset switch and system status indicator on the chassis to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.

3W Audio AMP Output Wafer Header
(4-pin SPEAKER1)
(see p.2, No. 28)



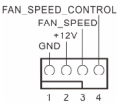
Please connect the chassis speaker to this header.

Power LED Header
(3-pin PLED1)
(see p.2, No. 11)

Please connect the chassis power LED to this header to indicate system power status. The LED is on when the system is operating. The LED keeps blinking in S1/S3 state. The LED is off in S4 state or S5 state (power off).

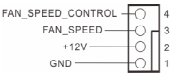
English

Chassis Fan Connector
(4-pin CHA_FAN1)
(see p.2, No. 4)



Please connect a fan cable to the fan connector and match the black wire to the ground pin.

CPU Fan Connectors
(4-pin CPU_FAN1)
(see p.2, No. 22)

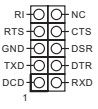


Though this motherboard provides a 4-Pin CPU fan (Quiet Fan) connector, 3-Pin CPU fans can still work even without fan speed control. If you plan to connect a 3-Pin CPU fan, please connect it to Pin 1-3.

SATA Power Connector
(SATA_POW1)
(see p.2, No. 10)

Please connect a SATA power cable.

Serial Port Header
(10-pin COM1)
(see p.2, No. 18)



This COM1 header supports a serial port module.

HDMI_SPDIF Header
(2-pin HDMI_SPDIF1)
(see p.2, No. 25)

This header provides SPDIF audio output to HDMI VGA cards, allowing the system to connect HDMI Digital TV/projector/LCD devices. Please connect the HDMI_ SPDIF connector of a HDMI VGA card to this header.

English

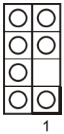
Backlight & Amp Volume Control Header
(8-pin BLT_VOL1)
(see p.2, No. 17)

1: BKLT_EN
2: BKLT_PWM
3: BKLT_PWR
4: BKLT_PWR
5: GND
6: GND
7: Brightness_Up
8: Brightness_Down

Digital MIC Header
(5-pin DMIC1)
(see p.2, No. 24)

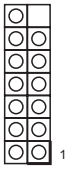
1: +5V
2: No pin
2: SPDIF_OUT/DMIC_CLK
3: GND
4: DMIC_DATA
5: +3.3V

Home Theater PC Header
(7-pin HTPC1)
(see p.2, No. 29)



PIN	Signal Name	PIN	Signal Name
8	HDMI CEC	7	#Power_Button
6	SMB_DATA	5	3.3V Standby
4	SMB_CLK	3	No pin
2	GND	1	Recording LED

LPC Debug Header
(13-pin LPC1)
(see p.2, No. 30)



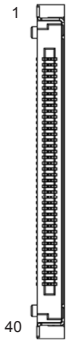
PIN	Signal Name	PIN	Signal Name
14	+3V	13	No pin
12	+3V	11	+3V
10	GND	9	GND
8	LAD3	7	LAD2
6	LAD1	5	LAD0
4	LFRAME#	3	RESET#
2	GND	1	CLK

English

LVDS Panel Connector

(40-pin LVDS1)

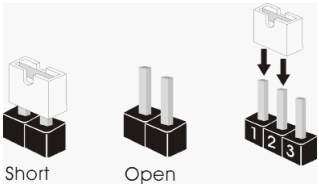
(see p.2, No. 15)



PIN	Signal Name	PIN	Signal Name
1	ODD_Lane3_P	21	NC
2	ODD_Lane3_N	22	EDID_3.3V
3	ODD_Lane2_P	23	LCD_GND
4	ODD_Lane2_N	24	LCD_GND
5	ODD_Lane1_P	25	LCD_GND
6	ODD_Lane1_N	26	ODD_CLK_P
7	ODD_Lane0_P	27	ODD_CLK_N
8	ODD_Lane0_N	28	BKLT_GND
9	EVEN_Lane3_P	29	BKLT_GND
10	EVEN_Lane3_N	30	BKLT_GND
11	EVEN_Lane2_P	31	EDID_CLK
12	EVEN_Lane2_N	32	BKLT_ENABLE
13	EVEN_Lane1_P	33	BKLT_PWM_DIM
14	EVEN_Lane1_N	34	EVEN_CLK_P
15	EVEN_Lane0_P	35	EVEN_CLK_N
16	EVEN_Lane0_N	36	BKLT_PWR (12V/19V)
17	EDID_GND	37	BKLT_PWR (12V/19V)
18	LCD_VCC (3.3V/5V/12V)	38	BKLT_PWR (12V/19V)
19	LCD_VCC (3.3V/5V/12V)	39	NC
20	LCD_VCC (3.3V/5V/12V)	40	EDID_DATA

1.5 Jumper Setup

When the jumper cap is placed on the pins, the jumper is “Short”. If no jumper cap is placed on the pins, the jumper is “Open”. The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when a jumper cap is placed on these 2 pins.



Clear CMOS Jumper
(CLRCMOS1)
(see p.2, No. 31)

CLRCMOS1 allows you to clear the data in CMOS. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLRCMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action. Please be noted that the password, date, time, user default profile, 1394 GUID and MAC address will be cleared only if the CMOS battery is removed.

Backlight Power Jumper
(3-pin BKT_PWR1)
(see p.2, No. 13)

1-2 : +19V
2-3 : +12V

Panel Power Jumper
(3-pin PNL_PWR1)
(see p.2, No. 14)

1-2 : +3V
2-3 : +5V

English

2. BIOS Information

The Flash Memory on the motherboard stores the BIOS Setup Utility. When you start up the computer, please press <F2> or <Del> during the Power-On-Self-Test (POST) to enter the BIOS Setup utility; otherwise, POST continues with its test routines. If you wish to enter BIOS Setup after POST, please restart the system by pressing <Ctl> + <Alt> + <Delete>, or pressing the reset button on the system chassis. The BIOS Setup program is designed to be user-friendly. It is a menu-driven program, which allows you to scroll through its various sub-menus and to select among the predetermined choices. For detailed information about BIOS Setup, please refer to the User Manual (PDF file) contained in the Support CD.

3. Software Support CD information

This motherboard supports various Microsoft® Windows® operating systems: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. The Support CD that came with the motherboard contains necessary drivers and useful utilities that will enhance motherboard features. To begin using the Support CD, insert the CD into your CD-ROM drive. It will display the Main Menu automatically if “AUTORUN” is enabled in your computer. If the Main Menu does not appear automatically, locate and double-click the file “ASRSETUP.EXE” in the Support CD to display the menu.

Spezifikationen

Plattform	Thin Mini-ITX Formfaktor: 17.0 cm x 17.0 cm; 6.7 Zoll x 6.7 Zoll (Kompatibel mit Mini-ITX)
	Festkondensator für CPU-Leistung
CPU	Unterstützt Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® Prozessoren der zweiten und dritten Generation mit bis zu 65W TDP für Sockel LGA1155
	Unterstützt Intel® Turbo Boost 2.0-Technologie
	Unterstützt freigegebene CPU der K-Serie
	Unterstützt Hyper-Threading-Technologie
Chipsatz	Intel® H61
	Unterstützt Intel® Rapid Start Technology und Smart Connect Technology
Speicher	Dual-Kanal DDR3 Speichertechnologie
	2 x DDR3 SO-DIMM-Steckplätze
	Unterstützt DDR3 1600/1333/1066 non-ECC, ungepufferter Speicher
	Max. Kapazität des Systemspeichers: 16GB
Erweiterungssteckplätze	1 x PCI Express 3.0 x4-Steckplatz (PCIE1: x4-Modus)
	1 x mini-PCI-Express-Steckplatz
Onboard-VGA	Unterstützt Intel® HD Graphics Built-in Visuals
	Pixel Shader 5.0, DirectX 11 mit Intel® Ivy Bridge-Prozessor. Pixel Shader 4.1, DirectX 10.1 mit Intel® Sandy Bridge-Prozessor
	Maximal gemeinsam genutzter Speicher 1760MB mit Intel® Ivy Bridge-Prozessor. Maximal gemeinsam genutzter Speicher 1759MB mit Intel® Sandy Bridge-Prozessor
	Drei VGA-Ausgangsoptionen: HDMI, DVI-I sowie LVDS
	Unterstützt HDMI 1.4a mit einer maximalen Auflösung von 1920 x 1200 bei 60 Hz
	Unterstützt DVI-I mit einer maximalen Auflösung von 1920 x 1200 bei 75 Hz
	Unterstützt LVDS mit einer maximalen Auflösung von 1920 x 1200 bei 60 Hz
	Unterstützt Auto Lip Sync, Deep Color (12bpc), xvYCC und HBR (High Bit Rate-Audio) mit HDMI
	Unterstützt HDCP mit HDMI
	Unterstutzt 1080p Blu-ray (BD) / HD-DVD-Wiedergabe mit HDMI

Audio	7.1 CH HD Audio mit dem Inhalt Schutz (Realtek ALC892 Audio Codec)
	Premium Blu-ray-Audio-Unterstützung
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Unterstützt Wake-On-LAN
	Unterstützt LAN-Kabelerkennung
	Unterstützt energieeffizientes Ethernet 802.3az
	Unterstützt PXE
E/A- Anschlüsse an der Rückseite	1 x Netzanschluss
	1 x DVI-I Anschluss
	1 x HDMI Anschluss
	1 x eSATA-Anschluss
	2 x USB 3.0-Anschlüsse durch Etron EJ188
	2 x USB 2.0-Anschlüsse
	1 x RJ-45 LAN Anschluss mit LED (ACT/LINK LED und SPEED LED)
	HD Audiobuchse: Lautsprecher vorne / Mikrofon
Anschlüsse	2 x SATA2 3,0 GB/s-Anschlüsse, unterstützen NCQ-, AHCI- und Hot Plug
	1 x Consumer Infrared-Modul-Header
	1 x COM-Anschluss-Header
	1 x HDMI_SPDIF-Anschluss
	1 x LVDS-Anschluss
	1 x LPC-Debugging-Stiftleiste
	1 x Heimkino-PC-Stiftleiste
	1 x CPUlüfter-Anschluss (4-pin)
	1 x Gehäuselüfter-Anschluss (4-pin)
	1 x Anschluss für Audio auf der Gehäusevorderseite
	1 x Analoger Raumklang-Stiftleiste
	1 x Digitale MIC-Stiftleiste
	1 x 3-W-Audio-AMP-Ausgangs-Wafer-Stiftleiste
	1 x SATA-Netz-Header
	3 x USB 2.0-Anschlüsse (Unterstützung 5 zusätzlicher USB 2.0-Anschlüsse)
	1 x USB 3.0-Anschluss durch Etron EJ188 (Unterstützung 2 zusätzlicher USB 3.0-Anschlüsse)
BIOS	32Mb AMIs Legal BIOS UEFI mit GUI-Unterstützung
	Unterstützung für “Plug and Play”
	ACPI 1.1-Weckfunktionen
	JumperFree-Modus

	SMBIOS 2.3.1
	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Stroms-pannung Multianpassung
Unterstützung CD	Treiber, Dienstprogramme, Antivirussoftware (Probever-sion), CyberLink MediaEspresso 6.5-Test version, Google Chrome-Browser und Toolbar
Hardware überwachung	Überwachung der CPU/Gehäuse Temperatur
	Drehzahlmessung für CPU/Gehäuse lüfter
	Geräuscharmer CPU-/Gehäuselüfter
	Mehrstufi ge Geschwindigkeitssteuerung für CPU/Gehäuse lüfter
	Spannungsüberwachung: +12V, +5V, +3.3V, Vcore
Betriebssysteme	Unterstützt Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Zertifizierungen	FCC, CE, WHQL
	Gemäß Ökodesign-Richtlinie (Stromversorgung gemäß Ökodesign-Richtlinie ErP/EuP erforderlich)

* Für die ausführliche Produktinformation, besuchen Sie bitte unsere Website: http://www.asrock.com

Spécifications

Format	Facteur de forme Thin Mini-ITX: 6.7 pouces x 6.7 pouces, 17.0 cm x 17.0 cm (Compatible avec Mini-ITX)
	Condensateurs robustes pour alimentation du CPU
CPU	Compatible avec les processeurs Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® de 2nde et 3ème génération avec un TDP max. de 65W et au format LGA1155
	Prend en charge la technologie Intel® Turbo Boost 2.0
	Prise en charge des unités centrales non verrouillées de série K
	Prise en charge de la technologie Hyper-Threading
Chipset	Intel® H61
	Prend en charge les technologies Intel® Rapid Start et Smart Connect
Mémoire	Compatible avec la Technologie de Mémoire à Canal Double
	2 x fentes DDR3 SO-DIMM
	Supporter DDR3 1600/1333/1066 non-ECC, sans amortissement mémoire
	Capacité maxi de mémoire système: 16GB
Slot d'extension	1 x slot PCI Express 3.0 x4 (PCIE1: mode x4)
	1 x emplacement mini-PCI Express
VGA sur carte	Prend en charge les visuels Intel® HD Graphics intégrés
	Pixel Shader 5.0, DirectX 11 avec CPU Intel® Ivy Bridge. Pixel Shader 4.1, DirectX 10.1 avec CPU Intel® Sandy Bridge
	Mémoire partagée max 1760MB avec CPU Intel® Ivy Bridge. Mémoire partagée max 1759MB avec CPU Intel® Sandy Bridge
	Trois options de sortie VGA: HDMI, DVI-I et LVDS
	Prend en charge le HDMI 1.4a avec une résolution maximale jusqu'à 1920x1200 @ 60Hz
	Prend en charge le DVI-I avec une résolution maximale jusqu'à 1920x1200 @ 75Hz
	Prend en charge le LVDS avec une résolution maximale jusqu'à 1920x1200 @ 60Hz
	Prend en charge Lip Sync, Deep Color (12bpc), xvYCC et HBR (High Bit Rate Audio: Audio à haut débit binaire) avec HDMI
	Prise en charge de la fonction HDCP avec port HDMI

	Supporter 1080p Blu-ray(BD)/ lecteur de HD-DVD avec port HDMI
Audio	7,1 CH HD Audio avec protection de contenu (Realtek ALC892 Audio Codec)
	Prise en charge de l'audio Premium Blu-ray
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Support du Wake-On-LAN
	Prise en charge de la détection de câble LAN
	Prend en charge la norme Energy Efficient Ethernet 802.3az
	Supporte PXE
E/A- An-schlüsse an der Rück-seite	1 x connecteur CC
	1 x port DVI-I
	1 x port HDMI
	1 x connecteur eSATA
	2 x ports USB 3.0 par Etron EJ188
	2 x ports USB 2.0
	1 x port LAN RJ-45 avec LED (ACT/LED CLIGNOTANTE et LED VITESSE)
	Prise HD Audio: Haut-parleur frontal / Microphone
Connecteurs	2 x connecteurs SATA2 3,0 Gb/s, prennent en charge NCQ, AHCI et Hot Plug
	1 x barrette pour module à infrarouges grand public
	1 x en-tête de port COM
	1 x connecteur HDMI_SPDIF
	1 x connecteur LVDS
	1 x connecteur de débogage LPC
	1 x connecteur PC home cinémaa
	1 x connecteur pour ventilateur de CPU (br. 4)
	1 x connecteurs pour ventilateur de Châssis (br. 4)
	1 x connecteur audio panneau avant
	1 x connecteur audio surround analogique
	1 x connecteur MIC numérique
	1 x connecteur plaquette audio AMP 3W
	1 x connecteur d'alimentation SATA
	3 x en-tête USB 2.0 (prendre en charge 5 ports USB 2.0 supplémentaires)
	1 x en-tête USB 3.0 par Etron EJ188 (prendre en charge 2 ports USB 3.0 supplémentaires)
BIOS	32Mb AMI UEFI Legal BIOS avec support GUI
	Support du "Plug and Play"

	Compatible pour événements de réveil ACPI 1.1
	Gestion jumperless
	Support SMBIOS 2.3.1
	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Tension Multi-ajustement
CD d'assistance	Pilotes, utilitaires, logiciel anti-virus (version d'évaluation), CyberLink MediaEspresso 6.5 Trial, Navigateur et barre d'outils Google Chrome
Surveillance système	Détection de la température de l'UC/châssis
	Tachéomètre ventilateur processeur/châssis ventilateur
	Ventilateur silencieux pour unité centrale/châssis
	Commande de ventilateur CPU/Châssis à plusieurs vitesses
	Monitoring de la tension: +12V, +5V, +3.3V, Vcore
OS	Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Certifications	FCC, CE, WHQL
	Prêt pour ErP/EuP (alimentation Prêt pour ErP/EuP requise)

* Pour de plus amples informations sur les produits, s'il vous plaît visitez notre site web: http://www.asrock.com

Specifiche

Piattaforma	Thin Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm (Compatibile con Mini-ITX)
	Condensatore solido per alimentazione CPU
Processore	Supporta i processori di 3a e 2a generazione Intel® Core™ i7/i5/i3/Xeon®/Pentium®/Celeron® che hanno fino 65W TDP in un pacchetto LGA1155
	Supporto della tecnologia Intel® Turbo Boost 2.0
	Supporta CPU unlocked serie K
	Supporto tecnologia Hyper Threading
Chipset	Intel® H61
	Supporta tecnologia Intel® Rapid Start Technology e Smart Connect Technology
Memoria	Supporto tecnologia Dual Channel Memory
	2 x alloggi DDR3 SO-DIMM
	Supporto DDR3 1600/1333/1066 non-ECC, momoria senza buffer
	Capacità massima della memoria di sistema: 16GB
Slot di espansione	1 x alloggio PCI Express 3.0 x4 (PCIE1 : modalità x4)
	1 x alloggio mini-PCI Express
VGA su scheda	Supporta Intel® HD Graphics Built-in Visuals
	Pixel Shader 5.0, DirectX 11 con CPU Intel® Ivy Bridge. Pixel Shader 4.1, DirectX 10.1 con CPU Intel® Sandy Bridge
	Memoria massima condivisa 1760MB con CPU Intel® Ivy Bridge. Memoria massima condivisa 1759MB con CPU Intel® Sandy Bridge
	Tre opzioni d'output VGA: HDMI, DVI-I e LVDS
	Supporta HDMI 1.4a con risoluzione massima fino a 1920x1200 @ 60Hz
	Supporta DVI-I con risoluzione massima fino a 1920x1200 @ 75Hz
	Supporta LVDS con risoluzione massima fino a 1920x1200 @ 60Hz
	Supporto Auto Lip Sync, Deep Color (12bpc), xvYCC e HBR (High Bit Rate Audio) con HDMI
	Supporto HDCP con le porte HDMI
	Supporto 1080p Blu-ray (BD) / HD-DVD riproduzione con le porte HDMI
Audio	7.1 CH HD Audio con protezioni contenuti (Realtek ALC892 Audio Codec)

	Supporto audio Blu-ray Premium
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Supporta Wake-On-LAN
	Supporta il rilevamento cavo LAN
	Supporta di Energy Efficient Ethernet 802.3az
	Supporta PXE
Pannello posteriore I/O	1 x connettore DC
	1 x porta DVI-I
	1 x porta HDMI
	1 x connettore eSATA
	2 x porte USB 3.0 dal controller Etron EJ188
	2 x porte USB 2.0
	1 x porta LAN RJ-45 con LED (LED azione/collegamento e LED velocità)
	Connettore HD Audio: cassa frontale / microfono
Connettori	2 x connettori SATA2 3.0Go/s, sopporta NCQ, AHCI e Hot Plug
	1 x connettore modulo infrarosso consumer
	1 x connettore porta COM
	1 x connettore HDMI_SPDIF
	1 x connettore LVDS
	1 x connettore Debug LPC
	1 x connettore Home Theater PC
	1 x connettore CPU ventola (4-pin)
	1 x connettore Chassis ventola (4-pin)
	1 x connettore audio sul pannello frontale
	1 x connettore audio Surround analogico
	1 x connettore digitale MIC
	1 x connettore uscita audio 3W AMP
	1 x connettore alimentazione SATA
	3 x connettori USB 2.0 (supporta 5 porte USB 2.0)
	1 x connettore USB 3.0 dal controller Etron EJ188 (supporta 2 porte USB 3.0)
BIOS	32Mb AMI UEFI Legal BIOS con interfaccia di supporto
	Supporta “Plug and Play”
	Compatibile con ACPI 1.1 wake up events
	Supporta jumperfree
	Supporta SMBIOS 2.3.1
	Regolazione multi-voltaggio CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA

CD di supporto	Driver, Utilità, Software AntiVirus (versione di prova), CyberLink MediaEspresso 6.5 Trial, Browser e barra degli strumenti Google Chrome
Monitoraggio Hardware	Sensore per la temperatura del processore/Chassis
	Indicatore di velocità per la ventola del CPU/Chassis
	Ventola CPU/Chassis silenziosa
	Ventola CPU/chassis con controllo di varie velocità
	Voltaggio: +12V, +5V, +3.3V, CPU Vcore
Compatibilità OS	Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Certificazioni	FCC, CE, WHQL
	Predisposto ErP/EuP (è necessaria l'alimentazione predisposta per il sistema ErP/EuP)

* Per ulteriori informazioni, prego visitare il nostro sito internet: http://www.asrock.com

Especificación

Plataforma	Factor forma Thin Mini-ITX: 17,0 cm x 17,0 cm, 6,7" x 6,7" (Compatible con Mini-ITX)
	Condensador sólido para alimentación de CPU
Procesador	Soporta 3ª y 2ª Generación de procesadores Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® con hasta 65W TDP en LGA1155 Package
	Admite la tecnología Intel® Turbo Boost 2.0 Technology
	Admite procesador desbloqueado de la serie K
	Admite tecnología Hyper Threading
Chipset	Intel® H61
	Admite las tecnologías Intel® Rapid Start y Smart Connect
Memoria	Soporte de Tecnología de Memoria de Doble Canal
	2 x ranuras DDR3 SO-DIMM
	Apoya DDR3 1600/1333/1066 non-ECC, memoria de un-buffered
	Máxima capacidad de la memoria del sistema: 16GB
Ranuras de Expansión	1 x ranura PCI Express 3.0 x4 (PCIE1: modo x4)
	1 x ranura de mini-PCI Express
VGA OnBoard	Admite Intel® HD Graphics Built-in Visuals
	Pixel Shader 5.0, DirectX 11 con CPU Intel® Ivy Bridge, Pixel Shader 4.1, DirectX 10.1 con CPU Intel® Sandy Bridge
	1760MB de Memoria máxima compartida con CPU Intel® Ivy Bridge. 1759MB de Memoria máxima compartida con CPU Intel® Sandy Bridge
	Tres opciones de salida VGA: HDMI, DVI-I y LVDS
	Admite HDMI 1.4a con una resolución máxima de 1920x1200 a 60 Hz
	Admite DVI-I con una resolución máxima de 1920x1200 a 75 Hz
	Admite LVDS con una resolución máxima de 1920x1200 a 60 Hz
	Admite Sincronización automática entre audio y vídeo, Deep Color (12 bpc), xvYCC y HBR (audio de alta tasa de bits) con HDMI
	Admite HDCP con puerto HDMI
	Apoya la reproducción de Blu-rayo de 1080p (BD) / HD-DVD con puerto HDMI
Audio	7.1 CH HD Audio con Protección de Contenido (Realtek ALC892 Audio Codec)

	Compatible con audio Blu-ray de alta calidad
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Soporta Wake-On-LAN
	Admite detección de conexión de cable LAN
	Compatible con Ethernet 802.3az de bajo consumo energético
	Compatible con PXE
Entrada/ Salida de Panel Trasero	1 x conector de CC
	1 x puerto DVI-I
	1 x puerto HDMI
	1 x conector eSATA
	2 x puertos USB 3.0 de Etron EJ188
	2 x puertos USB 2.0
	1 x puerto LAN RJ-45 con LED (LED de ACCIÓN/ENLACE y LED de VELOCIDAD)
	Conexión de audio: Altavoz frontal / Micrófono
Conectores	2 x conectores SATA2 de 3,0 Gb/s soporta NCQ, AHCI y de Hot Plug
	1 x Base de conexiones del módulo de infrarrojos para el consumidor
	1 x cabecera COM
	1 x cabecera HDMI_SPDIF
	1 x cabecera LVDS
	1 x base de conexiones de depuración LPC
	1 x base de conexiones PC para cine en casa
	1 x conector de ventilador de CPU (4-pin)
	1 x conector de ventilador de chasis (4-pin)
	1 x conector de audio de panel frontal
	1 x base de conexiones de audio envolvente analógico
	1 x base de conexiones MIC digital
	1 x base de conexiones plana de salida AMP de audio de 3 W
	1 x cabezal de alimentación SATA
	3 x cabezal USB 2.0 (admite 5 puertos USB 2.0 adicionales)
	1 x cabezal USB 3.0 de Etron EJ188 (admite 2 puertos USB 3.0 adicionales)
BIOS	32Mb AMI BIOS legal UEFI AMI compatible con GUI
	Soporta “Plug and Play”
	ACPI 1.1 compliance wake up events
	Soporta “jumper free”

	Soporta SMBIOS 2.3.1
	Múltiple ajuste de CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Voltage
CD de soport	Controladores, utilidades, software de antivirus (versión de prueba), Prueba de CyberLink MediaEspresso 6.5, Explorador y barra de herramientas Google Chrome
Monitor Hardware	Sensibilidad a la temperatura del procesador/chasis
	Taquímetros de los ventiladores del procesador/chasis
	Ventilador silencioso del procesador y el chasis
	Control de ajuste de la velocidad del ventilador de la CPU/chasis
	Monitor de Voltaje: +12V, +5V, +3.3V, Vcore
OS	En conformidad con Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Certificaciones	FCC, CE, WHQL
	Cumple con la directiva ErP/EuP (se requiere una fuente de alimentación que cumpla con la directiva ErP/EuP)

* Para más información sobre los productos, por favor visite nuestro sitio web: http://www.asrock.com

Спецификации

Платформа	форм-фактор Thin Mini-ITX: 6,7 x 6,7 дюйма / 17,0 x 17,0 см (Совместимость с Mini-ITX)
	Твердотельный конденсатор в цепи питания процессора
Процессор	Поддержка процессоров Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 2-го и 3-го поколений в исполнении LGA 1155, обладающих TDP не более 65 Вт
	Поддержка технологии Intel® Turbo Boost 2.0
	Поддержка разблокированного ЦП серии K
	Поддержка технологии Hyper-Threading
Набор микросхем	Intel® H61
	Поддержка технологии Intel® Rapid Start Technology и Smart Connect Technology
Память	Поддержка технологии Dual Channel DDR3 Memory Technology
	2 x разъема DDR3 SO-DIMM
	Поддержите DDR3 1600/1333/1066 не- ECC, безбуферная память
	Максимальный объем системной памяти: 16 ГБ
Гнезда расширения	1 x слота PCI Express 3.0 x4 (PCIE1: режим x4)
	1 x слот mini-PCI Express
Графика	Поддержка встроенных технологий визуализации Intel® HD Graphics
	Pixel Shader 5.0, DirectX 11 с процессором Intel® Ivy Bridge, Pixel Shader 4.1, DirectX 10.1 с процессором Intel® Sandy Bridge
	Макс. объем разделяемой памяти 1760Мб с процессором Intel® Ivy Bridge. Макс. объем разделяемой памяти 1759Мб с процессором Intel® Sandy Bridge
	Три VGA-выхода: HDMI, DVI-I и LVDS
	Поддержка HDMI 1.4a с максимальным разрешением до 1920x1200 @ 60 Гц
	Поддержка DVI-I с максимальным разрешением до 1920x1200 @ 75 Гц
	Поддержка LVDS с максимальным разрешением до 1920x1200 @ 60 Гц
	Поддержка Auto Lip Sync, Deep Color (12 бит на цветовой канал), xvYCC и HBR (High Bit Rate Audio) через HDMI
	Поддержка функции HDCP через разъемы HDMI

	Подержат Blu-луч 1080p (КОММУТАЦИОННАЯ ДОСКА) / воспроизведение HD-DVD через разъемы HDMI
Аудиосистема	7.1 CH HD Аудио HD с Довольной Защитой (Кодер-декодер Аудио Realtek ALC892)
	Поддержка Premium Blu-ray audio
ЛВС	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Поддержка Wake-On-LAN
	Поддержка определения кабеля ЛВС
	Поддержка энергосберегающего интерфейса Ethernet 802.3az
	Поддержка PXE
Разъемы ввода-вывода на задней панели	1 x разъем DC
	1 x DVI-I порт
	1 x HDMI порт
	1 x eSATA порт
	2 x порта USB 3.0 от контроллера Etron EJ188
	2 x порта USB 2.0
	1 x Разъем RJ-45 LAN с светодиодным индикатором (индикатор ACT/LINK и индикатор SPEED)
	Соединитель звуковой подсистемы: передняя колонка / микрофон
Колодки и плате	2 x разъема SATA2 3,0 Гбит/с, поддержка NCQ, AHCI и горячего подключения
	1 x Датчик пользовательского инфракрасного модуля
	1 x Колодка COM
	1 x Колодка HDMI_SPDIF
	1 x Колодка LVDS
	1 x разъем отладки LPC
	1 x разъем ПК домашнего кинотеатра
	1 x соединитель ЦП FAN (4-контактный)
	1 x соединитель Шасси FAN (4-контактный)
	1 x Аудиоразъем передней панели
	1 x разъем аналогового объемного звука
	1 x Цифровой разъем для микрофона
	1 x Транзисторный выход на Аудио усилитель 3 Вт
	1 x разъем питания SATA
	3 x Колодка USB 2.0 (одна колодка для поддержки 5 дополнительных портов USB 2.0)

	1 x Колодка USB 3.0 от контроллера Etron EJ188 (одна колодка для поддержки 2 дополнительных портов USB 3.0)
BIOS	32 Мб AMI UEFI Legal BIOS с поддержкой GUI
	поддержка “Plug and Play”
	ACPI 1.1, включение по событиям
	поддержка режима настройки без перемычек
	поддержка SMBIOS 2.3.1
	Регулировка напряжений процессора Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA
Компакт-диск поддержки	Драйверы, служебные программы, антивирусное программное обеспечение (пробная версия), Пробная версия программы CyberLink MediaEspresso 6.5, Браузер и панель инструментов Google Chrome
Контроль оборудо-вания	Датчики температуры ЦП/Шасси
	Тахометры вентиляторов ЦП/Шасси
	Бесшумный вентилятор ЦП/Шасси
	Мультиконтроль скорости вентилятора ЦП/Шасси
	Контроль= напряжения: +12V, +5V, +3.3V, Vcore
Операцион система	Совместимость с Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Поддержка 64-разрядной версии Vista™ / XP / XP 64-bit
Сертификаты	FCC, CE, WHQL
	Совместимость с ErP/EuP Ready (требуется блок питания совместимый с ErP/EuP)

* Для детальной информации продукта, пожалуйста посетите наш вебсайт: http://www.asrock.com

Especificações

Plataforma	Formato Thin Mini-ITX: 6,7 pol. x 6,7 pol., 17,0 cm x 17,0 cm (Compatível com Mini-ITX)
	Condensador Solid para alimentação da CPU
CPU	Suporta 3ª e 2ª Geração de Processadores Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® com TDP de até 65W em LGA1155
	Suporta a tecnologia Intel® Turbo Boost 2.0
	Suporta K-Series desbloqueado CPU
	Suporta a tecnologia Hyper-Threading
Chipset	Intel® H61
	Suporta a tecnologia Rapid Start da Intel® e a tecnologia Smart Connect
Memória	Suporte à tecnologia de memória de duplo canal
	2 x ranhuras DDR3 SO-DIMM
	Suporta memória DDR3 1600/1333/1066, não ECC, sem tampão
	Capacidade máxima de memória do sistema: 16GB
Slots de Expansão	1 x slot de PCI Express 3.0 x4 (PCIE1 modo @ x4)
	1 x ranhura mini-PCI Express
VGA integrado	Suporta gráficos incorporados Intel® HD
	Pixel Shader 5.0, DirectX 11 com Intel® Ivy Bridge CPU, Pixel Shader 4.1, DirectX 10.1 com processadores Intel® Sandy Bridge CPU
	Memória partilhada máxima 1760MB com Intel® Ivy Bridge CPU. Memória partilhada máxima 1759MB com Intel® Sandy Bridge CPU
	Três opções de saída VGA: HDMI, DVI-I e LVDS
	Suporta HDMI 1.4a Tecnologia com resolução máxima até 1920x1200 @ 60Hz
	Suporta DVI-I Tecnologia com resolução máxima até 1920x1200 @ 75Hz
	Suporta LVDS Tecnologia com resolução máxima até 1920x1200 @ 60Hz
	Suporta Sincronização automática do som, Profundidade da cor (12bpc), xvYCC e HBR (áudio de taxa de bits elevada) com HDMI
	Suporta HDCP com HDMI
	Suporta a norma Blu-ray de alta definição 1080p (BD) / e a reprodução de DVDs de alta definição com HDMI

Áudio	Áudio HD de 7.1 canais com protecção de conteúdo (Realtek ALC892 Audio Codec)
	Suporte áudio Blu-ray superior
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Suporta Wake-On-WAN
	Suporta Detecção de cabo LAN
	Suporta Ethernet com Eficiência Energética 802.3az
	Suporta PXE
Entrada / Saída pelo painel	1 x ficha DC
	1 x porta DVI-I
	1 x porta HDMI
	1 x conector eSATA
	2 x portas USB 3.0 através Etron EJ188
	2 x portas USB 2.0
	1 x porta LAN RJ-45 com LED (LED ACT/LIG e LED VELO-CIDADE)
	Ficha de áudio HD: Altifalante frontal/Microfone
Conectores	2 x conectores SATA2 a 3,0 Gb/s, com suporte para NCQ, AHCI e Hot Plug
	1 x conector CIR
	1 x conector de porta COM
	1 x conector HDMI_SPDIF
	1 x conector LVDS
	1 x conector de depuração LPC
	1 x conector de cinema em casa de PC
	1 x conector do ventilador da CPU (4 pinos)
	1 x conector do ventilador da chassis (4 pinos)
	1 x conector Áudio do painel frontal
	1 x conector de áudio surround analógico
	1 x conector MIC digital
	1 x conector de saída áudio 3W de AMP para Woofer
	1 x conector de força SATA
	3 x cabezal USB 2.0 (suporta 5 portas USB 2.0)
	1 x cabezal USB 3.0 através Etron EJ188 (suporta 2 portas USB 3.0)
BIOS	32mb BIOS UEFI oficial da AMI com suporte para GUI
	Suporta dispositivos “Plug and Play”
	ACPI 1.1 atendendo a eventos de “wake up”
	Suporta dispositivos sem jumper
	Suporte para SMBIOS 2.3.1

	IGPU, DRAM, 1,8V PLL, VTT, Multi-ajuste de Tensão VCCSA
CD de suporte	Controladores, utilitários, software antivírus (Experimentacao Versao), CyberLink MediaEspresso 6.5 versão de demonstração, Navegador e Barra de Ferramentas Google Chrome
Monitor do HW	Sensores de temperature do procesador/chassis
	Tacômetros de ventilador do processador/chassis
	Ventoinha silenciosa para a processador/chassis
	CPU/Chassis Fan Controle Multi-Velocidade
	Monitoramento de voltagem : +12 V, +5 V, +3.3 V, CPU Vcore
Sistema Operacional	Microsoft® Windows® 8 / 8 de 64 bits / 7 / 7 de 64 bits / Vista™ / Vista™ de 64 bits / XP / XP de 64 bits
Certificações	FCC, CE, WHQL
	"ErP/EuP Ready" (é necessária alimentação eléctrica "ErP/EuP Ready")

* Para informações mais detalhadas por favor visite o nosso sítio Web: http://www.asrock.com

Özellikler

Platform	Thin Mini-ITX Form Faktörü: 6,7-inç x 6,7-inç, 17,0 cm x 17,0 cm (Mini-ITX ile uyumludur)
	CPU gücü için Katı Kapasitör
CPU	LGA1155 paketinde olan 65W'a kadar TDP değerine sahip 3ncü ve 2nci nesil Intel Core i7/i5/i3/Xeon/Pentium/Celeron işlemcileri destekler
	Intel® Turbo Boost 2.0 Teknolojisini destekler
	K-Serisi kilidi kaldırılmış işlemciyi destekler
	Hyper-Threading Teknolojisini destekler
Yonga seti	Intel® H61
	Intel® Rapid Start Teknolojisini ve Smart Connect Teknolojisi'ni destekler
Bellek	Çift Kanallı DDR3 Belleği Teknolojisi
	2 x DDR3 SO-DIMM yuvası
	DDR3 1600/1333/1066 ECC olmayan, ara belleksiz bellek
	Sistem belleğinin maks. kapasitesi: 16GB
Genişletme Yuvası	1 x PCI Express 3.0 x4 yuva (PCIE1: x4 modu)
	1 x mini-PCI Express yuvası
Grafikler	Intel® HD Graphics Yerleşik Görsellerini destekler
	Pixel Shader 5.0, Intel® Ivy Bridge işlemciye sahip DirectX 11. Pixel Shader 4.1,Intel® Sandy Bridge işlemciye sahip DirectX 10.1
	Intel® Ivy Bridge işlemciye sahip Maks. paylaюəlan bellek 1760 MB. Intel® Sandy Bridge işlemciye sahip Maks. paylaюəlan bellek 1759 MB
	Ьз VGA Зəkəю seзenepi: HDMI, DVI-I ve LVDS
	60Hz'de 1920x1200'e kadar maks. зцzьnьrlьkle HDMI 1.4a Teknolojisini destekler
	75Hz'de 1920x1200'e kadar maks. зцzьnьrlьkle DVI-I Teknolojisini destekler
	60Hz'de 1920x1200'e kadar maks. зцzьnьrlьkle LVDS Teknolojisini destekler
	Auto Lip Sync, Deep Color (12bpc), HDMI ile xvYCC ve HBR'yi (Yьksek Bit Həzlə Ses) destekler
	HDMI portlarəyla HDCP iюlevini destekler
	HDMI portlarəyla Tam HD 1080p Blu-ray (BD) / HD-DVD oynatəmənə destekler
Ses	İçerik Korumalı (Realtek ALC892 Ses Codec'i) 7,1 Kanal HD Ses

	Premium Blu-ray ses desteği
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/sn
	RTL8111E-VL
	LAN'da Uyan özelliğini destekler
	LAN Kablo Algılama'yı destekler
	Enerji Verimli Ethernet 802.3az desteği
	PXE'yi destekler
Arka Panel G/3	1 x DC jakı
	1 x DVI-I portu
	1 x HDMI portu
	1 x eSATA konektörü
	2 x USB 3.0 bağlantı noktası Etron EJ188
	2 x USB 2.0 bağlantı noktası
	1 x RJ-45 LAN Portu, LED'li (AKT/LƏNK LED'i ve HIZ LED'i)
	HD Ses Jakı: Ön Hoparlör / Mikrofon
Konektör	2 x SATA2 3,0Gb/sn, donanım NCQ, AHCI ve Sistem Açıkken Bileşen Takma
	1 x Kullanıcı Kızılötesi Modül Bağlantısı
	1 x COM portu fişi
	1 x HDMI_SPDIF fişi
	1 x LVDS fişi
	1 x LPC arıza giderme başlık yeri
	1 x Ev sineması PC başlık yeri
	1 x CPU FAN konektörü (4 pin)
	1 x Kasa FAN konektörü (4 pin)
	1 x Ön panel ses konektörü
	1 x Analog Surround Ses başlık yeri
	1 x Dijital MIC başlık yeri
	1 x 3W Ses AMP Çıkış Woofer başlık yeri
	1 x SATA güç konektörü
	3 x USB 2.0 bağlantı noktası (5 USB 2.0 portu destekler)
	1 x USB 3.0 bağlantı noktası Etron EJ188 (2 adet USB 3.0 bağlantı noktasını destekler)
BIOS	32Mb GUI destekli AMI UEFI Geçerli BIOS
	"Tak Çalıştır"ı destekler
	ACPI 1.1 Uyumlu Uyandırma Olayları
	Jumpersız ayarlamayı destekler
	SMBIOS 2.3.1 Desteği
	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA Voltaj Çoklu ayarı

Destek CD'si	Sürücüler, Yardımcı Programlar, AntiVirüs Yazılımı (Deneme Sürümü), CyberLink MediaEspresso 6.5 Deneme Sürümü, Google Chrome Tarayıcı ve Araç Çubuğu
Donanım Monitör	CPU/Kasa Sıcaklık Duyarlılığı
	CPU/Kasa Takometresi
	İşlemci/Kasa Sessiz Fanı
	CPU/Kasa Fan Çoklu-Hız Kontrolü
	Voltaj İzleme: +12V, +5V, +3,3V, CPU Vcore
İS	Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit uyumlu
Sertifikalar	FCC, CE, WHQL
	ErP/EuP Hazır (ErP/EuP hazır güç kaynağı gerekli)

* Ayrıntılı ürün bilgileri için lütfen web sitemizi ziyaret edin:
http://www.asrock.com

플랫폼	Thin Mini-ITX 폼 팩터 : 6.7” x 6.7”, 17.0 x 17.0 cm (미니 -ITX 와 호환 가능)
	CPU 전원용 솔리드 콘덴서
CPU	LGA1155 패키지로 제공되는 최대 65W TDP 의 3 세대및 2 세대 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 프로세서 지원
	Intel® Turbo Boost 2.0 기술 지원
	K- 시리즈 잠금 해제 CPU 지원
	하이퍼 - 스레딩 기술 지원
칩셋	Intel® H61
	Intel® Rapid Start 기술과 Smart Connect 기술을 지원합니다
메모리	듀얼 채널 메모리 기술 지원
	DDR3 SO-DIMM 슬롯 2 개
	DDR3 1600/1333/1066 비 -ECC, 언버퍼드 메모리를 지원
	최대 시스템 메모리 용량 : 16GB
확장 슬롯	1 개의 PCI Express 3.0 x4 슬롯 (PCIE1: x4 모드)
	1 개의 mini-PCI Express 슬롯
온보드 VGA	Intel® HD 그래픽 내장형 비주얼 지원
	Intel® Ivy Bridge CPU 를 탑재한 DirectX 11, Pixel Shader 5.0. Intel® Sandy Bridge CPU 를 탑재한 DirectX 10.1, Pixel Shader 4.1
	Intel® Ivy Bridge CPU 를 탑재한최대 공유 메모리 1760MB, Intel® Sandy Bridge CPU 를 탑재한최대 공유 메모리 1759MB
	3 개의 VGA 출력 옵션 : HDMI, DVI-I 및 LVDS
	최대 해상도 1920x1200 @ 60Hz 까지 HDMI 1.4a 지원
	최대 해상도 1920x1200 @ 75Hz 까지 DVI-I 지원
	최대 해상도 1920x1200 @ 60Hz 까지 LVDS 지원
	자동 립 싱크 , 딥 컬러 (12bpc), xvYCC, HBR(고비트율 오디오), HDMI 지원
	HDMI 포트를 이용한 HDCP 기능 지원
	HDMI 포트를 이용한 1080p Blu-ray (BD) / HD-DVD 재생을 지원
오디오	7.1 CH HD Audio 목록 보호 (Realtek ALC892 Audio Codec)
	Premium Blu-ray 오디오 지원
랜	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL

	웨이크 - 온 - 랜 지원
	LAN 케이블 감지 지원
	절전형 이더넷 802.3az 지원
	PXE 지원
후면판 I/O	1 개 DC 잭
	1 개의 DVI-I
	1 개의 HDMI
	1 개 eSATA 커넥터
	2 개 Etron EJ188 용 USB 3.0 포트
	2 개 USB 2.0 포트
	1 개 LED(ACT/LINK LED 및 SPEED LED) 가 있는 RJ-45 LAN 포트
	오디오 잭 : 전방 스피커 / 마이크
온보드 헤더 및 커넥터	2 개 의 SATA2 3.0Gb/s 커넥터 , NCQ, AHCI 및 Hot Plug 기능 지원
	소비자용 적외선 모듈 헤더 1 개
	COM 포트 헤더 1 개
	HDMI_SPDIF 헤더 1 개
	LVDS 헤더 1 개
	LPC 디버그 헤더 1 개
	홈 시어터 PC 헤더 1 개
	CPU 팬 커넥터 1 개 (4 핀)
	섀시 팬 커넥터 1 개 (4 핀)
	전면부 오디오 콘넥터 1 개
	아날로그 서라운드 오디오 헤더 1 개
	디지털 MIC 헤더 1 개
	3W 오디오 AMP 출력 웨이퍼 헤더 1 개
	SATA 전원 헤더 1 개
	USB 2.0 헤더 3 개 (5 개의 추가 USB 2.0 포트를 지원)
	Etron EJ188 용 USB 3.0 헤더 1 개 (2 개의 USB 3.0 포트 지원)
BIOS	32Mb GUI 지원을 제공하는 AMI UEFI 적합형 BIOS
	“플러그 앤 플레이” 지원
	ACPI 1.1 웨이크 - 업 이벤트와의 호환
	점퍼 프리 지원
	SMBIOS 2.3.1 지원
	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA 전압 멀티 조절
지원 CD	드라이버 , 유틸리티 , 백신 소프트웨어 (시험판), CyberLink MediaEspresso 6.5 평가판 , Chrome 브라우저 및 도구 모음

하드웨어 모니터	CPU/ 마더보드 온도 감지
	CPU/ 섀시 팬 회전 속도계
	CPU/ 섀시 저소음 팬
	CPU/ 섀시 팬 멀티스피드 컨트롤
	전압 감시 기능 : +12V,+5V,+3.3V,Vcore
OS	마이크로 소프트 Windows® 8/8 64 비트 /7/7 64 비트 / Vista™/Vista™ 64 비트 /XP/XP 64 비트 와 호환
인증서	FCC, CE, WHQL
	ErP/EuP 지원 (ErP/EuP 지원 전원 공급기가 요구됨)

* 상세한 제품정보는 당사의 웹사이트를 방문할수있습니다 .
http://www.asrock.com

仕様

プラットフォーム	Thin Mini-ITX フォームファクター：6.7-in x 6.7-in, 17.0 cm x 17.0 cm (Mini-ITX との互換性)
	CPU 電源用固体コンデンサ
CPU	第 3 および第 2 世代の Intel® Core® i7 / i5 / i3 / Xeon® / Pentium® / Celeron® プロセッサー（最大 TDP 65W / LGA1155 ）対応
	Intel® Turbo 2.0 ブーストテクノロジをサポート
	K シリーズのアンロック CPU
	ハイパースレッドテクノロジをサポート
チップセット	Intel® H61
	Intel® Rapid Start テクノロジおよび Smart Connect テクノロジをサポートします
メモリー	デュアルチャネル DDR3 メモリ技術
	DDR3 SO-DIMM スロット x 2
	DDR3 1600/1333/1066 non-ECC, un-buffered メモリーに対応
	システムメモリの最大容量：16GB
拡張スロット	1 x PCI Express 3.0 x4 スロット (PCIE1: x4 モード)
	1 x mini-PCI Express スロット
グラフィック	Intel® HD グラフィックス・ビルトイン・ビジュアル機能に対応
	Intel® Ivy Bridge CPU を搭載した DirectX 11、Pixel Shader 5.0。Intel® Sandy Bridge CPU を搭載した DirectX 10.1、Pixel Shader 4.1
	Intel® Ivy Bridge CPU を搭載し最大の共有メモリ 1760MB。Intel® Sandy Bridge CPU を搭載し最大の共有メモリ 1759MB
	3 つの VGA 出力オプション：HDMI、DVI-I、LVDS
	1920x1200@60Hz の最大解像度で HDMI 1.4a をサポート
	1920x1200@75Hz の最大解像度で DVI-I をサポート
	1920x1200@60Hz の最大解像度で LVDS をサポート
	オート・リップシンク、ディープカラー(12bpc)、xvYCC、HBR (High Bit Rate)オーディオ、HDMI をサポート
	HDCP、HDMI ポートをサポート
	1080p Blu-ray (BD) / HD-DVD 再生サポート、HDMI ポートをサポート
オーディオ	7.1 CH HD オーディオ（コンテンツ保護付）(Realtek ALC892 オーディオ Codec)
	Premium Blu-ray オーディオのサポー

LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Wake-On-LAN をサポート
	LAN ケーブル検出をサポート
	Energy Efficient Ethernet 802.3az をサポート
	PXE をサポート
リアパネル I/O	DC ジャック x 1
	DVI-I ポート x 1
	HDMI ポート x 1
	eSATA コネクタ x 1
	2 x USB 3.0 ポート (Etron EJ188)
	2 x USB 2.0 ポート
	LED (ACT/LINK LED および SPEED LED)付き RJ-45 LAN ポート
	オーディオジャック: 前部スピーカー、マイク入力
コネクター	2 x SATA2 3.0Gb/ 秒コネクタが ,NCQ、AHCI および Hot Plug
	コンシューマー赤外線モジュールヘッダー x 1
	COM ポートヘッダ x 1
	HDMI_SPDIF ヘッダー x 1
	LVDS ヘッダー x 1
	LPC デバッグヘッダー x 1
	ホームシアター PC ヘッダー x 1
	CPU ファンコネクタ x 1 (4 ピン)
	シャーシファンコネクタ x 1 (4 ピン)
	フロントパネルオーディオコネクター x 1
	アナログサラウンドオーディオヘッダー x 1
	デジタルマイクヘッダー x 1
	3W オーディオアンプ出力ウェーハヘッダー x 1
	SATA 電源コネクター x 1
	USB 2.0 ヘッダー (USB 2.0 用 5 ポートをサポート) x 3
	USB 3.0 ヘッダー (Etron EJ188) (USB 3.0 用 2 ポートをサポート) x 1
BIOS	32Mb AMI UEFI Legal BIOS(GUI サポート)
	プラグ&プレイをサポート
	ACPI 1.1 準拠ウェイクアップイベント
	jumperfree モードサポート
	SMBIOS 2.3.1 サポート
	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA 電圧のマルチ調整

サポート CD	ドライバ、ユーティリティ、AntiVirus ソフトウェア (試用バージョン)、CyberLink MediaEspresso 6.5 試用版、Google Chrome ブラウザとツールバー
モニター	CPU/ シャーシ温度検知
	CPU/ シャーシファンタコメータ
	CPU/ シャーシ静音ファン
	CPU/ シャーシファンマルチ速度制御
	電源モニター : +12V, +5V, +3.3V, Vcore
OS	Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
認証	FCC, CE, Microsoft® WHQL 認証済み
	ErP/EuP 対応(ErP/EuP 対応の電源装置が必要です)

* 製品の詳細については、http://www.asrock.com を御覧なさい。

主板规格

架构	Thin Mini-ITX 规格： 6.7 英寸 X 6.7 英寸， 17.0 厘米 X 17.0 厘米（兼容 Mini-ITX）
	CPU 供电电路固态电容
处理器	支持 LGA1155 封装的 Intel® 第二代 / 第三代 Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 处理器，散热设计功耗（TDP）达 65W
	支持 Intel® Turbo Boost 2.0 技术
	支持 K- 系列解锁的 CPU
	支持 Hyper-Threading 超线程技术
芯片组	Intel® H61
	支持 Intel 快速启动技术和 Intel 智能连接技术
系统内存	支持双通道 DDR3 内存技术
	2 个 DDR3 SO-DIMM 内存插槽
	支持 DDR3 1600/1333/1066 non-ECC、un-buffered 内存
	最高支持 16GB 系统容量
扩展插槽	1 个 PCI Express 3.0 x4 插槽（PCIE1：x4 模式）
	1 个 mini-PCI Express 插槽
板载显卡	支持 Intel® HD Graphics 内置视觉特性
	Intel® Ivy Bridge CPU 支持 Pixel Shader 5.0、DirectX 11 技术。Intel® Sandy Bridge CPU 支持 Pixel Shader 4.1、DirectX 10.1 技术
	Intel® Ivy Bridge CPU 支持最大共享内存 1760MB。Intel® Sandy Bridge CPU 支持最大共享内存 1759MB
	支持三个 VGA 输出选项 :HDMI、DVI-I 和 LVDS
	支持 HDMI 1.4a，最高分辨率达 1920x1200 @ 60Hz
	支持 DVI-I，最高分辨率达 1920x1200 @ 75Hz
	支持 LVDS，最高分辨率达 1920x1200 @ 60Hz
	支持 HDMI，可支持 Auto Lip Sync、Deep Color (12bpc)、xvYCC 与 HBR（高位速音频）
	通过 HDMI 接口支持 HDCP 功能
	通过 HDMI 接口可播放 1080 线蓝光光盘 (BD)/HD-DVD 光盘
音效	7.1 声道高保真音频，支持内容保护功能 (Realtek ALC892 音频编解码器）
	支持优质蓝光音效
板载 LAN 功能	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	支持网路唤醒（Wake-On-LAN）
	支持网路线侦测功能
	支持 Energy Efficient Ethernet 802.3az
	支持 PXE

后面板输入/输出接口	1 个直流电源接口
	1 个 DVI-I 接口
	1 个 HDMI 接口
	1 个 eSATA 接口
	2 个 Etron EJ188 的 USB 3.0 接口
	2 个 USB 2.0 接口
	1 个 RJ-45 局域网接口与 LED 指示灯 (ACT/LINK LED 和 SPEED LED)
	高保真音频插孔：前置喇叭 / 麦克风
连接头	2 个 SATA2 3.0Gb/s 连接头，支持 NCQ，AHCI 和热插拔
	1 个消费类红外线模块接头
	1 个串行接口
	1 个 HDMI_SPDIF 接头
	1 个 LVDS 接头
	1 个 LPC 诊断卡接口
	1 个家庭影院电脑接口
	1 个 CPU 风扇接头（4 针）
	1 个机箱风扇接头（4 针）
	前置音频面板接头
	1 个模拟环绕音频输出接口
	1 个数字麦克风接口
	1 个 3W 音频功放输出接口
	1 个 SATA 电源接头
	3 个 USB 2.0 接针（可支持 5 个额外的 USB 2.0 接口）
	1 个 Etron EJ188 的 USB 3.0 接针（可支持 2 个额外的 USB 3.0 接口）
BIOS	32Mb AMI UEFI Legal BIOS，支持 GUI
	支持即插即用（Plug and Play）
	ACPI 1.1 电源管理
	支持 jumperfree 免跳线模式
	支持 SMBIOS 2.3.1
	CPU Core，IGPU，DRAM，1.8V PLL，VTT，VCCSA 电压多功能调节器
支持光盘	驱动程序，工具软件，杀毒软件（测试版本），CyberLink MediaEspresso 6.5 试用版，Google Chrome 浏览器和工具栏
硬件监控器	CPU/ 主板温度侦测
	CPU/ 机箱风扇转速计
	CPU/ 机箱静音风扇
	CPU/ 机箱风扇多速控制
	电压范围：+12V，+5V，+3.3V，核心电压

操作系统	Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/Vista™ 64 位元适用于此主板
认证	FCC, CE, WHQL
	支持 ErP/EuP（需要同时使用支持 ErP/EuP 的电源供应器）

* 请参阅华擎网站了解详细的产品信息： http://www.asrock.com

电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及 SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为 10 年。

图一

有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板及电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。

备注： 此产品所标示之环保使用年限，系指在一般正常使用状况下。

主機板規格

架構	Thin Mini-ITX 規格： 6.7 英吋 x 6.7 英吋， 17.0 公分 x 17.0 公分 （相容 Mini-ITX）
	CPU 供電電路固態電容
處理器	支援最高達 65W TDP 第 3 代與第 2 代 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 處理器 (LGA1155 封裝)
	支援 Intel® Turbo Boost 2.0 技術
	支援 K 系列解除鎖定 CPU
	支援 Hyper-Threading 技術
晶片組	Intel® H61
	支援 Intel 快速啟動技術和 Intel 智能連接技術
系統記憶體	支援雙通道 DDR3 記憶體技術
	2 個 DDR3 SO-DIMM 插槽
	支援 DDR3 1600/1333/1066 non-ECC、un-buffered 記憶體
	最高支援 16GB 系統容量
擴充插槽	1 個 PCI Express 3.0 x4 插槽 (PCIE1： x4 模式)
	1 個 mini-PCI Express 插槽
內建顯示	支援 Intel® HD Graphics Built-in Visuals
	Intel® Ivy Bridge CPU 支援 Pixel Shader 5.0、DirectX 11 技術。Intel® Sandy Bridge CPU 支援 Pixel Shader 4.1、DirectX 10.1 技術
	Intel® Ivy Bridge CPU 支援最大共享記憶體 1760MB。Intel® Sandy Bridge CPU 支援最大共享記憶體 1759MB
	支援三個 VGA 輸出選項： HDMI、DVI-I 和 LVDS
	支援 HDMI 1.4a, 最高解析度達 1920x1200 @ 60Hz
	支援 DVI-I, 最高解析度達 1920x1200 @ 75Hz
	支援 LVDS, 最高解析度達 1920x1200 @ 60Hz
	支援 HDMI, 可支援 Auto Lip Sync、Deep Color (12bpc)、xvYCC 與 HBR(高位元率音效)
	HDMI 接口支援 HDCP 功能
	HDMI 接口可播放 1080p 藍光光碟 (BD)/HD-DVD 光碟
音效	7.1 聲道高清晰音效，支援內容保護功能 (Realtek ALC892 音效編解碼器)
	支援高級藍光音效
網路功能	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	支援網路喚醒 (Wake-On-LAN)
	支援網路線偵測功能
	支援 Energy Efficient Ethernet 802.3az
	支援 PXE

後背板輸入/輸出接口	1 個直流電源接口
	1 個 DVI-I 接口
	1 個 HDMI 接口
	1 個 eSATA 接口
	2 個 Etron EJ188 的 USB 3.0 接口
	2 個 USB 2.0 接口
	1 個 RJ-45 區域網接口與 LED 指示燈 (ACT/LINK LED 和 SPEED LED)
	高清晰音效插孔：前置喇叭 / 麥克風
接頭	2 個 SATA2 3.0Gb/s 接頭，支援 NCQ, AHCI 和熱插拔功能
	1 個消費性紅外線模組插座
	1 個序列埠
	1 個 HDMI_SPDIF 接頭
	1 個 LVDS 接頭
	1 個 LPC 除錯卡接口
	1 個家庭影院電腦接口
	1 個 CPU 風扇接頭 (4 針)
	1 個機箱風扇接頭 (4 針)
	前置音效接頭
	1 個模擬環繞音頻輸出接口
	1 個數位麥克風接口
	1 個 3W 音頻功放輸出接口
	1 個 SATA 電源接頭
	3 個 USB 2.0 接頭 (可支援 5 個額外的 USB 2.0 接口)
	1 個 Etron EJ188 的 USB 3.0 接頭 (可支援 2 個額外的 USB 3.0 接口)
BIOS	32Mb AMI UEFI Legal BIOS (支援 GUI)
	支援即插即用 (Plug and Play)
	ACPI 1.1 電源管理
	支援 jumperfree 免跳線模式
	支援 SMBIOS 2.3.1
	CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA 電壓多功能調節
支援光碟	驅動程式，工具軟體，防毒軟體 (試用版本),CyberLink MediaEspresso 6.5 試用版,Google Chrome 瀏覽器和工具列
硬體監控	CPU/ 主機板溫度偵測
	CPU/ 機箱風扇轉速計
	CPU/ 機箱靜音風扇
	CPU/ 機箱風扇多速控制
	電壓範圍：+12V, +5V, +3.3V, 核心電壓

操作系統	Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/ Vista™ 64 位元 /XP/XP 64 位元
認證	FCC, CE, WHQL
	支援 ErP/EuP(需要同時使用支援 ErP/EuP 的電源供應器)

＊ 請參閱華擎網站了解詳細的產品訊息：http://www.asrock.com

Spesifikasi

Podium	Faktor Form Thin Mini-ITX: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm (Kompatibel dengan Mini-ITX)
	Kapasitor Solid untuk daya CPU
CPU	Mendukung prosesor Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® Generasi Ke-3 dan Ke-2 dengan TDP hingga 65W dalam Kemasan LGA1155
	Mendukung Teknologi Intel® Turbo Boost 2.0
	Mendukung CPU K-Series jenis “unlocked”
	Mendukung Teknologi Hyper-Threading
Grup Chip	Intel® H61
	Mendukung Intel® Rapid Start Teknologi dan Smart Connect Teknologi
Ingatan	Teknologi ingatan DDR3 dwisaluran
	2 slot DDR3 SO-DIMM
	Mendukung memori DDR3 1600/1333/1066 non-ECC yang tidak di-buffer
	Kapasitas paling banyak: 16GB
Slot ekspansi	1 x slot PCI Express 3.0 x4 (PCIE1:mode x4)
	1 x slot mini-PCI Express
Grafis	Mendukung Intel® HD Graphics Built-in Visuals
	Pixel Shader 5.0, DirectX 11 dengan Intel® Ivy Bridge CPU, Pixel Shader 4.1, DirectX 10.1 dengan Intel® Sandy Bridge CPU
	Ingatan sama Max. 1760MB dengan Intel® Ivy Bridge CPU. Ingatan sama Max. 1759MB dengan Intel® Sandy Bridge CPU
	Tiga pilihan VGA Output: HDMI, DVI-I dan LVDS
	Mendukung HDMI 1.4a Teknologi dengan resolusi maksimal hingga 1920x1200 @ 60Hz
	Mendukung DVI-I Teknologi dengan resolusi maksimal hingga 1920x1200 @ 75Hz
	Mendukung LVDS Teknologi dengan resolusi maksimal hingga 1920x1200 @ 60Hz
	Mendukung Auto Lip Sync, Deep Color (12bpc), xvYCC dan HBR (High Bit Rate Audio) dengan HDMI
	Mendukung HDCP dengan port HDMI
	Mendukung pemutaran 1080p Blu-ray (BD) / HD-DVD dengan port HDMI

Audio	7.1 CH HD Audio dengan Content Protection (Realtek ALC892 Audio Codec)
	Mendukung Premium Blu-ray audio
LAN	PCIE x1 Gigabit LAN 10/100/1000 Mb/s
	RTL8111E-VL
	Mendukung Wake-On-LAN
	Mendukung Deteksi Kabel LAN
	Mendukung Energy Efficient Ethernet 802.3az
	Mendukung PXE
Papan Belakang I/O	1 x soket DC
	1 x port DVI-I
	1 x port HDMI
	1 x port eSATA
	2 x port USB 3.0 dari Etron EJ188
	2 x port USB 2.0
	1 x RJ-45 LAN Port LED (ACT/LINK LED dan SPEED LED)
	Soket Audio HD: Speaker/Mikrofon Depan
Konektor	2 x konektor SATA2 3.0Gb/s, dapat mendukung NCQ, AHCI dan Hot Plug
	1 x komponen CIR
	1 x komponen COM
	1 x komponen HDMI_SPDIF
	1 x komponen LVDS
	1 x komponen debug LPC
	1 x komponen PC Home Theater
	1 x komponen Kipas CPU (4 pin)
	1 x komponen Kipas casis (4 pin)
	1 x komponen audio panel dapan
	1 x komponen Audio Surround Analog
	1 x komponen MIC digital
	1 x komponen Wafer Output AMP Audio 3W
	1 x komponen power SATA
	3 x komponen USB 2.0 (mendukung 5 port USB 2.0)
	1 x komponen USB 3.0 dari Etron EJ188 (mendukung 2 port USB 3.0)
BIOS	32Mb AMI UEFI Legal BIOS dengan dukungan GUI
	Mendukung “Plug and Play”
	ACPI 1.1 Compliance Wake Up Events
	Mendukung jumperfree
	Penyokong AMBIOS 2.3.1
	Penyesuaian berbagai tegangan CPU Core, IGPU, DRAM, 1.8V PLL, VTT, VCCSA

CD dukungan	Driver, Utilitas, Perangkat Lunak Antivirus (Versi Percobaan), CyberLink MediaEspresso 6.5 Versi Percobaan, Browser Google Chrome dan Toolbar
Monitor Perangkat Keras	Perasa Suhu CPU/Casis
	Pengukur Kipas CPU/casis
	Kipas CPU/Sasis Senyap
	Kontrol Multi-Kecepatan Kipas CPU/casis
	Penjagaan voltasi: +12V, +5V, +3.3V, Vcore
OS	Dapat digunakan Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Sertifikasi	FCC, CE, WHQL
	ErP/EuP Ready (memerlukan catu daya ErP/EuP ready)

* Untuk informasi rinci, silakan kunjungi website kami:
http://www.asrock.com